**From:** Laidlaw, Tina
**To:** "Suplee, Mike"
**Subject:** Rec use removal example
**Date:** Tuesday, June 18, 2013 12:36:57 PM
**Attachments:** EPA Comments on Stream Reclass Nov 2010.pdf

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Mike,

When you have a second, would you mind giving me a call to discuss next Monday's meeting? Also, wanted to chat with you about the River Breaks criteria.

I thought this letter to WY might be useful for you to see. Check out the discussion starting on page 3. It discusses different factors for doing rec use UAAs.

Tina

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**From:** Tina Laidlaw [mailto:Laidlaw.Tina@epamail.epa.gov]
**Sent:** Tuesday, June 18, 2013 10:10 AM
**To:** Laidlaw, Tina
**Subject:** Fw: DW use removal example

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION 8**
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November 30, 2010

Ref: 8EPR-EP

Richard Thorp
Division of Water Quality
Wyoming Department of Environmental Quality
Herschler Building 4W
122 W. 25th, 4th Floor
Cheyenne, WY 82002

Subject: EPA's Comments on Proposed Stream Reclassifications

Dear Mr. Thorp:

The U.S. Environmental Protection Agency (EPA) Region 8's Water Quality Unit (WQU) has reviewed the Use Attainability Analyses (UAAs) supporting the proposed stream reclassifications that were published for public comment on October 25, 2010. The proposed changes affect the designated uses for recreation, fisheries, fish consumption, or drinking water on 15 waterbodies; Kirby Creek, Bear Creek, Dater Creek, Fox Creek, Jay Em Creek, Little Cottonwood Creek, Muskrat Creek, Negro Baby Creek, Deer Creek, Red Cloud Slough, Cherry Creek, Cottonwood Creek, Sage Creek, Rawhide Creek and Horse Creek.

In general, the WQU supports the proposed changes to the fisheries and fish consumption uses. We do not support the drinking water use removals due to the lack of a demonstration that drinking water is not an existing use. For the recreation use changes, we recommend deferring action because the State is working on a state-wide recreation UAA that will contain additional documentation relevant to the evaluation of the potential for these waters to support primary contact recreation. We also have specific questions and concerns regarding the recreation UAAs in support of the current proposals. The WQU submits the following detailed comments for the State's consideration.

**Federal and State Regulatory Context**

EPA's water quality standards (WQS) regulation states in 40 CFR § 131.10(g) that "States may remove a designated use which is not an existing use, as defined in section 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible" based on six criteria. The six criteria in 40 CFR § 131.10(g) are included in Wyoming's Water Quality Rules and Regulations, Chapter 1, Section 33(b). 40 CFR § 131.3(g) defines a UAA as "a structured scientific assessment of the factors affecting the attainment of the

use which may include physical, chemical, biological, and economic factors as described in § 131.10(g)." EPA's regulation also specifies when a UAA is required (40 CFR § 131.10(j)):

> A State must conduct a use attainability analysis as described in 40 CFR §131.3(g) whenever: (1) the State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or (2) the State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria.

The uses specified in section 101(a)(2) of the Clean Water Act (CWA) include "propagation of fish, shellfish, and wildlife" and "recreation in and on the water" (101(a)(2) uses). There is a rebuttable presumption that 101(a)(2) uses are attainable unless demonstrated otherwise. Although 40 CFR § 131.10(j) is focused on 101(a)(2) uses, and does not address non-101(a)(2) uses such as drinking water, 40 CFR § 131.10(g) allows removal of a designated use "which is *not* an existing use" only if the State can "demonstrate" that the use is not attainable under the six criteria outlined in that section (63 Fed. Reg. 36742, 36757 (July 7, 1998)). Requirements pertaining to the State's demonstration are found at 40 CFR § 131.20(b), which requires that supporting analyses be made available to the public for review, and 40 CFR § 131.6(b), which requires that methods and supporting analyses be submitted to EPA.

In addition, Wyoming's WQS require a UAA to add or remove a designated use from Class 2, 3 or 4 waters (Water Quality Rules and Regulations, Chapter 1, Section 33(b) and (c)). Wyoming's process for reviewing and making determinations regarding UAAs is described in Section 34, including the requirement for public notice and comment. Wyoming also has a UAA Implementation Policy (UAA Policy) that provides further guidance.

**Summary of Proposed Designated Use Changes**

The current public notice includes proposed use changes for 15 waterbodies. Table 1 below summarizes the proposed changes for each waterbody.

**Table 1. Summary of Proposed Use Changes**

| Waterbody | Proposed Use Change(s) |
|---|---|
| Kirby Creek | Primary to secondary contact recreation |
| Bear Creek | Primary to secondary contact recreation |
| Dater Creek | 2AB to 2C (coldwater game fishery to warmwater non-game fishery and removal of drinking water use) and primary to secondary contact recreation |
| Fox Creek | Primary to secondary contact recreation |
| Jay Em Creek | Primary to secondary contact recreation |
| Little Cottonwood Creek | Primary to secondary contact recreation |
| Muskrat Creek | Primary to secondary contact recreation |
| Negro Baby Creek | Primary to secondary contact recreation |

| Waterbody | Proposed Use Change(s) |
|---|---|
| Deer Creek | 2AB to 2C (coldwater game fishery to warmwater non-game fishery and removal of drinking water use) |
| Red Cloud Slough | Primary to secondary contact recreation |
| Cherry Creek | 2AB to 2C (coldwater game fishery to warmwater non-game fishery and removal of drinking water use) and primary to secondary contact recreation |
| Cottonwood Creek | 3B to 2C (add non-game fisheries and fish consumption uses) and primary to secondary contact recreation |
| Sage Creek | Primary to secondary contact recreation |
| Rawhide Creek | Primary to secondary contact recreation |
| Horse Creek | 2AB to 2ABww (coldwater game fishery to warmwater game fishery) |

**Wyoming's Designated Uses and Classifications**

Wyoming's WQS include designated uses, which are identified in Section 3. The designated uses relevant to the proposed reclassifications are recreation, drinking water, fisheries, and fish consumption. Wyoming's WQS group (or bundle) designated uses in different Classifications (Section 4). Changing a designated use may or may not involve reclassifying the waterbody. For example, all of the Classifications include recreation as a designated use, but that could be either primary or secondary contact recreation. Changing (or subcategorizing) the recreation designated use from primary to secondary contact recreation does not require reclassifying a waterbody. This change is severable from the associated Classification, meaning changing the recreation use from primary to secondary contact does not affect other designated uses in the same Classification. Therefore, if the State or stakeholder wants to change a waterbody from primary to secondary contact, the UAA only needs to address the recreation designated use.

In contrast, some reclassifications to a waterbody can change multiple designated uses. For example, reclassifying a waterbody from 2AB to 2C results in removal of the drinking water use and a change from coldwater game fishery to warmwater non-game fishery. As a result, this reclassification must be supported by information that supports the changes to both the fisheries and drinking water designated uses. When a reclassification results in changes to multiple designated uses, the rationale provided to the public for comment and submitted to EPA must address all of the designated use changes.

**Recreation**

The State is proposing to change the designated recreation use from primary to secondary contact recreation for 13 waterbodies, resulting in the application of less-stringent criteria for E. coli bacteria (see Section 27(a) and (b)).

Recreation is a 101(a)(2) use and 40 CFR § 131.10(j) requires a UAA in order to adopt a subcategory which requires less stringent criteria, such as secondary contact. In 2008, EPA approved the creation of the secondary contact use subcategory, however a UAA must be

completed prior to putting individual waterbodies into this subcategory. EPA's suggested approach for determining whether primary contact recreation is an attainable use is to look at a suite of factors, such as actual use, existing water quality, water quality potential, access, recreational facilities, location, safety considerations, and physical conditions (63 Fed. Reg. 36742, 36756 (July 7, 1998) and EPA Region 8's 1992 Guidance *Recreation Standards and the CWA Section 101(a)(2) "Swimmable" Goal*[1]).

Wyoming's WQS require a UAA to add or remove a designated use (Section 33). Wyoming's UAA Policy states a UAA is required when changing from primary to secondary contact (Section II(C)). Section V of the UAA Policy describes the information that must be included in the UAA and states "each UAA must contain information and or data that is specific to the petition being made and to the associated Section 33(b) factor where relevant." The proposed reclassifications are all based on factor (b)(ii), except Kirby Creek which also cites (b)(v). For (b)(ii), the UAA Policy says "The establishment of this factor needs to be supported by sufficient data to characterize actual flow conditions on a year-round basis. Consideration must be given to seasonal variations in flow, climate and consumptive water use." For (b)(v), the UAA Policy says "The critical point that must be established by the information in the UAA is that the lack of habitat or recreational opportunity is a natural condition and not caused by hydrologic modifications, land uses, or other human activities." Section VII of the UAA Policy describes the procedures for recreation designations, as well as a Recreational Use Designations UAA Worksheet. For each of the 13 waterbodies, this worksheet was completed by the Goshen County Conservation District, with the exception of Kirby Creek, which was completed by the Hot Springs County Conservation District.

EPA recommends deferring action on the proposed changes to recreation uses because the State is working on a state-wide recreation UAA that will contain additional documentation relevant to the evaluation of the potential for these waters to support primary contact recreation. In support of our recommendation to defer action, below are comments describing general concerns with many of the recreation UAAs, and also waterbody-specific comments and questions.

*Actual Use*

For most of the waterbodies, the only documentation of actual use consists of the lack of a mark next to the statements below:

_____ Water is located within or flows through a federal, state, or local park or recreation area. Federal, state or local parks should not be construed to mean all public lands, but rather specifically developed and/or designated recreational use areas such as campgrounds, picnic grounds, trailheads, greenways, etc..
_____ Water is a lake, reservoir or other still body of water. (*Exclude small stock watering ponds*).
_____ Water is within or flows through a municipality or unincorporated high density housing area.

[1] Available at http://www.epa.gov/region8/water/wqs/wqsdocs.html.

_____ Water is a larger perennial stream or game fishery known to be used by sportsmen or other recreationists.
_____ Water is used or can be used for primary contact activities such as swimming, floating, rafting, canoeing or kayaking.

The failure to observe these activities or physical conditions during a single site visit lacks the persuasiveness of affirmative statements and information about that waterbody. For example, our understanding is that the state-wide UAA would include information from different Geographical Information System (GIS) layers such as distance from population centers, recreation areas, and schools for each waterbody.

Resident interviews (referred to as landowner testimony by the State) are also an important tool in evaluating recreation uses because residents observe the waterbody over time, whereas a site visit provides one snapshot in time. States have developed creative ways to document the knowledge of local residents, including in-person interviews, leaving postage-paid postcard surveys for residents not home during site visits, surveys via phone calls, e-mail or online tools. Five of the UAAs currently include documentation of resident interviews. Likewise, interviews with local land management agencies, local governments, recreational user groups, and school children are also useful. Public comment periods are another form of documentation, but may be less effective at reaching local residents that would be knowledgeable about the waterbody because the residents may not be aware of the comment period. The documentation made available to the public for review and submitted to EPA should explain the State's efforts to identify existing uses.

*Access*

Access is affected by multiple factors (e.g., remoteness, fenced property, roads, bike paths adjacent to the waterbody), but except in extreme cases limitations on access do not preclude uses. Accordingly, access alone is unlikely to be a valid basis for removing primary contact recreation but may be considered in combination with other factors. Likewise, private land surrounding a waterbody may serve as an indicator of whether access is probable, but that alone is not a valid basis for removing primary contact recreation. State law regarding the protection of private property is a separate issue from – and is unaffected by – a determination under the CWA as to the level of protection appropriate for a waterbody. The recreational protection afforded a waterbody under the CWA neither grants nor restricts permission to use that water for recreation. The State's proposed reclassification notice makes general statements about private land surrounding the waterbodies and that there is "little public access," but there are no affirmative statements that describe the public access to each waterbody. How many public roads cross the waterbody? Can the public access the waterbody from the road, or is it fenced off or dangerous due to topography?

*Physical Conditions*

Because all of the recreation use changes are based on 40 CFR § 131.10(g)(2) (identical to Section 33(b)(ii) in Wyoming's regulations), it is worth noting the regulation states "natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the

use…" Physical conditions such as low flow obviously can prevent recreation such as swimming, boating and fishing. But it is important to remember that children often play in low flow waterbodies. Regarding water flow and depth, UAAs should consider the particular types of recreational activities that may occur, and evaluate flow and depth differently in areas where children have easy access to the waterbody. EPA encourages states to conduct site visits during times when children are likely to recreate. When this is not possible, states can interview local residents or school children/staff to determine recreation uses. The UAAs do not address children's play or proximity to schools.

The representativeness of data is also important when evaluating physical conditions for the ability to support recreation uses based on 40 CFR § 131.10(g)(2). Flow conditions are affected by the local climate, including precipitation and snowmelt, temperature and drought. When evaluating recreation uses it is important to collect data that is representative for the waterbody during the time of year when recreation is likely. It appears that most of the site visits to these waterbodies were done during low flow times of the year (August or September) and during a drought.[2] The UAAs for the waterbodies below do not appear to meet the State's UAA Policy requirement of "sufficient data to characterize actual flow conditions on a year-round basis." What is the State's basis for concluding these site visits are representative of the normal flow conditions during the time of year when recreation is likely?

The type of data collected is also important. The UAAs included stream velocity and wetted width data, which are less informative than flow volume and depth. Noting where the nearest U.S. Geological Survey gauging station is to the waterbody is also useful information. Only two of the UAAs included precipitation (readily available from the Wyoming State Climate Office), and none of them looked at drought status, which is also readily available from the U.S. Drought Monitor, as indicated in footnote 2. States have also used satellite images to document presence or absence of water in stream channels and land use over time.

Kirby Creek

Kirby Creek is an intermittent stream that flows for 22 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. The UAA states this watershed normally receives 6-14 inches of precipitation annually. The pictures show a narrow channel containing ice in December 2006 and a predominately dry channel with some standing water in July 2007 (100% of County in moderate drought; 92% severe drought). No flow data were submitted. The UAA indicates a water monitoring program was conducted for three years during the spring, summer and fall. What data were collected? If there are no flow data, it would be helpful to state that. The UAA documents conversations with landowners and residents that indicate primary contact is not an existing use. Landowners/residents indicated the stream is not wide enough and has insufficient flow during summer months for primary contact and the volume of spring flow and low water and air temperatures make swimming and wading unsafe at that time of year. Land ownership along Kirby Creek includes a mix of private, state and federal lands with predominate land uses being cattle and sheep ranching and petroleum development. There are no large population centers close to the watershed. There is one all-weather access to

[2] The WQU used the U.S. Drought Monitor to determine drought status of the waters at the time of data collection (http://drought.unl.edu/dm/dmshps_archive.htm).

the watershed and there are less than a dozen residents from the confluence with the Big Horn River to the headwaters of the creek. The public notice indicates Kirby Creek was placed on the 2002 Clean Water Act Section 303(d) list as threatened for fecal coliform, but no water quality data was included.

Bear Creek

Bear Creek is a perennial stream that flows for 51 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Two landowners that have observed Bear Creek at least twice a week for 5-12 years submitted testimony that they have not witnessed primary contact and that there is no public access from their land. How many miles of the 51 mile length do these landowners own or routinely observe? The State's proposed reclassification notice indicates the majority of the land surrounding the Creek is private with little public access. A description of what public access is available should be included in the UAA. Although not noted in the documentation, EPA staff are aware that access to Bear Creek from Highway 85 is fenced. If access from other road crossings is affected by a fence, this should be included in the documentation. The confluence with Horse Creek is also near the Hawk Springs State Recreation Area, which offers boating, waterskiing, fishing, picnicking, and camping. The Division of State Parks and Historic Sites administers and maintains the Hawk Springs, while the Wyoming Game and Fish Department (WGFD) regulates the recreational use of the water and stocks the reservoir with fish. Why was this not discussed in the UAA? Did the Department of Environmental Quality contact either of these resource managers to confirm whether any recreation is happening on Bear Creek? Photos from site visits in August 2005 show flow sufficient for primary contact at 5 sites (62% of Goshen County in moderate drought, but Laramie County had no drought conditions). Data from the site visits show velocity ranged from 0.71 to 1.53 ft/sec and wetted width of 6.0 to 10.7 ft. Bear Creek was historically stocked with coldwater game species between 1933 and 1952. Fish surveys found coldwater game species (brown trout) in 1986, but none were found during surveys in 1993 or 2005. The UAA states the majority of Bear Creek is narrow and shallow with low water velocity, and is dominated by sand and silt substrate.

Dater Creek

Dater Creek is a perennial stream that flows for about 2 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Landowner testimony indicates primary contact recreation is not an existing use and there is no public access. The State's proposed reclassification notice indicates the majority of the land surrounding the Creek is private with little public access. The documentation should clearly describe the public access (road crossing at Highway 151? Fenced?). Photos from site visit in August 2005 show low flow and narrow channel (62% of Goshen County in moderate drought). Data from site visit show velocity ranged from 0.22 to 0.37 ft/sec and wetted width was 2.9 to 18.5 ft. WGFD did not find game species in 1971, 1995 or 2006 (although one brook trout was observed in 1971).

Fox Creek

Fox Creek is a perennial stream that flows for about 21 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Landowner testimony

indicates primary contact recreation is not an existing use and there is no public access. The State's proposed reclassification notice indicates all of the land surrounding the Creek is private with little public access. The documentation should clearly describe the public access. Photos show low flow and narrow channel at four sites in August 2005 (62% of Goshen County was in a moderate drought at this time). Data from site visit show velocity ranged from 1.28 to 1.54 ft/sec and wetted width was 3.3 to 5.1 ft.

Jay Em Creek

The State's proposed reclassification notice states Jay Em Creek is a perennial stream that flows for about 18 miles, but the UAA states that it is intermittent. Photos from upper site in September 2006 show no flow and no discernable channel (100% of County in moderate drought; 89% severe drought; 46% extreme drought). Photos from lower site near confluence with Rawhide Creek in August 2006 (100% of County severe drought) show narrow channel with low flow that widens to ponded area under a bridge. Data from lower site show velocity of 1.02 ft/sec and wetted width of 4.5 ft. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. The State's proposed reclassification notice indicates the land surrounding the Creek is private with little public access. The documentation should clearly describe the public access. The WGFD letter notes that although the survey in August 2005 found only nongame fish, "Jay Em Creek has several deep, wide ponded areas, which made thorough sampling difficult." WGFD stated the Creek has historically supported populations of brown trout and rainbow trout and has the potential to support game species despite the impacts of drought.

Little Cottonwood Creek

Little Cottonwood Creek is an ephemeral stream that flows for about 2 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from an August 2006 (100% of County in severe drought) site visit show poor channel definition and no flow. The segment is surrounded by private land with no public access. The documentation should clearly describe the public access.

Muskrat Creek

Muskrat Creek is an intermittent stream that flows for about 30 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from an August 2005 (62% of Goshen County in a moderate drought) site visit show no or low flow at all eight sites and 18 miles dry even though the region experienced higher than average precipitation levels (4.53 inches vs. average of 2.45 inches in June). Flow data from August 2005 site visit show no or low flow at seven sites. Conversations with landowners during site visits indicated the Creek is dry during much of the year. Game fish were not present during WGFD sampling in 2005 or 2006.

Negro Baby Creek

Negro Baby Creek is an intermittent stream for 6.5 miles and perennial in the lower 1.5 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from site visits in August (100% of County in severe drought) and September 2006 (100% moderate drought; 89% severe drought; and 46% extreme drought) show no flow and poor channel definition in the intermittent section. Photos in August 2006 of perennial section show narrow channel with low flow. Data indicate velocity at the site was 0.06 ft/sec and wetted width was 3 ft. First known fish sampling of the Creek was conducted in the perennial section in July 2007 by WGFD and found predominately non-game species. Two brook trout were present, which the UAA attributed to private stocks. The State's proposed reclassification notice indicates almost all of the land surrounding the Creek is private with little public access.

Red Cloud Slough

The UAA indicates Red Cloud Slough is a perennial stream that flows for seven miles, but the pictures look more ephemeral or intermittent with no flow and no discernable channel at all 4 sites visited in August (100% of County in severe drought) and September 2006 (100% moderate drought; 89% severe drought; and 46% extreme drought). The UAA Worksheet indicates primary contact recreation is not an existing or potential use. First known fish sampling of Red Cloud Slough was conducted by WGFD in July 2007. Green sunfish (warmwater game fish) was the only species found 0.1 miles upstream of a man-made impoundment (which the UAA attributed to private stocks), but the rest of segment was dry. The State's proposed reclassification notice indicates all of the land surrounding is private with little public access.

Cherry Creek

The State's proposed reclassification notice indicates Cherry Creek is an intermittent stream that flows for 34 miles, but the UAA indicates it is intermittent for the first 15 miles, then sinks subsurface and reemerges as perennial for another 19 miles. Photos show low or no flow at 4 sites in the intermittent section in June 2005 (96% of Goshen County in moderate drought; 51% severe drought). Photos from three sites in the perennial section show flow in August 2005 (62% of County in moderate drought). Data indicate velocity ranged from 0.36 to 1.90 ft/sec with a wetted width of 9.2 to 16.5 ft. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. The State's proposed reclassification notice states the land surrounding Cherry Creek is primarily private with little public access. The documentation should clearly describe the public access. WGFD survey in 2006 found no fish in the intermittent segment. Sampling in the perennial segment in 1995 and 2006 found nongame fish.

Cottonwood Creek

Cottonwood Creek is an intermittent stream that flows for about 10 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from site visits in August 2006 (100% of the County in severe drought) and July 2007 (100% moderate drought; 19% severe drought) show no flow and no discernable channel at two sites. A private landowner granted WGFD access to an isolated pool in the upper reach in July 2007, but

no fish were collected. The State's proposed reclassification notice indicates warmwater non-game fish were collected in 2006 and the land surrounding Cottonwood Creek is private with little public access.

Sage Creek

Sage Creek is a perennial stream that flows for about 6 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from site visits show no or low flow at all 3 sites in August (100% of the County in severe drought) and September 2006 (100% moderate drought; 89% severe drought; 46% extreme drought). Data indicate no flow at upper site, standing pool at next site, and velocity of 0.6 ft/sec at most downstream site with wetted width of 2.5 ft. The State's proposed reclassification notice indicates the land surrounding Sage Creek is private with no public access.

Rawhide Creek

Rawhide Creek is a perennial stream that flows for 70 miles. The UAA Worksheet indicates primary contact recreation is not an existing or potential use. Photos from site visits in August 2005 (62% of County in moderate drought) show no or low flow at 6 sites, but flow at 4 sites (RC4, RC5, RC6, and RC10) appears sufficient for primary contact even during a low flow month and at a time when 62% of the County was in a moderate drought. A WGFD June 1939 survey says "there was less than one-half cfs of water flowing in many parts of the stream," but also said "holes are very large and deep in certain sections" and recommended stocking brown or brook trout. University of Wyoming graduate student surveys in June 1993 and June 2000 found warmwater game fish (green sunfish) in the middle reach. A WGFD survey in August 2005 found nongame fish.

**Fisheries**

The State is proposing the following changes:

(1) Coldwater game fishery to warmwater non-game fishery (2AB to 2C) – Dater Creek, Deer Creek, and Cherry Creek. EPA's understanding is that this reclassification would result in the following aquatic life criteria changes: maximum allowable turbidity increase changes from 10 NTUs to 15 NTUs (Section 23(a) and (b)); maximum allowable increase in temperature changes from 1.1 $^{o}$C degrees to 2.2 $^{o}$C (Section 25 (b) and (c)); maximum allowable temperature changes from 20 $^{o}$C to 30 $^{o}$C (Section 25 (d)).
(2) Addition of non-game fishery use (3B to 2C) – Cottonwood Creek. EPA's understanding is that this reclassification would result in the application of more stringent criteria for ammonia, dissolved oxygen, turbidity, and temperature.
(3) Coldwater game fishery to warmwater game fishery (2AB to 2ABww) – Horse Creek. EPA's understanding is that this reclassification would result in the following aquatic life criteria changes: maximum allowable turbidity increase changes from 10 NTUs to 15 NTUs (Section 23(a) and (b)); maximum allowable increase in

temperature changes from 1.1 $^{o}$C degrees to 2.2 $^{o}$C (Section 25 (b) and (c)); maximum allowable temperature changes from 20 $^{o}$C to 30 $^{o}$C (Section 25 (d)).

The proposed reclassifications are all based on factor (b)(v). For (b)(v), the UAA Policy says "The critical point that must be established by the information in the UAA is that the lack of habitat or recreational opportunity is a natural condition and not caused by hydrologic modifications, land uses, or other human activities."

In general, the UAAs completed by the Goshen County Conservation District include: (1) stream habitat data from site visits during low flow conditions with photo-documentation of each site; (2) historic fish sampling data where available; and (3) a letter of support from the WGFD supporting the proposed use change.

Dater Creek

The State is proposing to reclassify Dater Creek from 2AB to 2C, resulting in a change in the fisheries use from coldwater game fishery to warmwater non-game fishery.
The UAA completed by the Goshen County Conservation District provides one day of data in August 2005 at expected low flow describing the potential aquatic life use, supplemented by historic sampling efforts and a letter from Wyoming Game and Fish Department supporting the proposed reclassification. The UAA presents a Section 33(b)(v) demonstration that a coldwater fishery is not supported largely due to lack of physical habitat (narrow width, shallow depth, limited flow and velocity, and homogeneous sand/silt substrate). WGFD fish sampling in 1995 and 2006 did not detect either coldwater or warmwater game species. The WQU's preliminary position is that the UAA supports the designated use change from coldwater fishery to non-game fishery. However, because the UAA does not address removal of the drinking water use (see discussion below), the UAA does not support reclassification of Dater Creek from 2AB to 2C.

Deer Creek

The State is proposing to reclassify Deer Creek from 2AB to 2C, resulting in a change in the fisheries use from coldwater game fishery to warmwater non-game fishery. The UAA completed by Goshen County Conservation District includes habitat sampling and data for two sites on two days in August 2006 at expected low flow. The habitat data are supplemented by historic aquatic life sampling efforts and a letter from WGFD supporting the reclassification. The aquatic life use change is based on a Section 33(b)(v) demonstration that a coldwater fishery is not supported largely due to lack of physical habitat (narrow width, shallow depth, limited flow and velocity, homogeneous sand/silt substrate, high temperatures). Fish sampling by the WGFD in 2005 and 2006 did not detect either coldwater or warmwater game fish, but did find non-game fish. The WQU's preliminary position is that the UAA supports the designated use change from coldwater fishery to non-game fishery. However, because the UAA does not address removal of the drinking water use (see discussion below), the UAA does not support reclassification of Deer Creek from 2AB to 2C.

Cherry Creek

The State is proposing to reclassify Cherry Creek from 2AB to 2C, resulting in a change in the fisheries use from coldwater game fishery to warmwater non-game fishery. The UAA completed by Goshen County Conservation District states that the upper section of Cherry Creek is intermittent and flows 15 miles before sinking to subsurface flow. The Creek reemerges and continues to flow as a perennial stream for an additional 19 miles. The UAA includes habitat sampling and data for seven sites, four on the upper section and three on the lower section. The upper section was sampled in June 2005 and the lower section in August 2005. The habitat data are supplemented by historic aquatic life sampling efforts and a letter from WGFD supporting the reclassification. The aquatic life use change is based on a Section 33(b)(v) demonstration that a coldwater fishery is not supported largely due to lack of physical habitat (narrow width, shallow depth, limited flow and velocity, homogeneous sand/silt substrate, high temperatures). Fish sampling by the WGFD in the upper section in 2006 did not find any fish species. Fish sampling in the lower section in 1995 and 2006 did not detect either coldwater or warmwater game fish, but did find warmwater non-game fish. The WQU's preliminary position is that the UAA supports the designated use change from coldwater fishery to non-game fishery. However, because the UAA does not address removal of the drinking water use (see discussion below), the UAA does not support reclassification of Cherry Creek from 2AB to 2C.

Cottonwood Creek

The State is proposing to reclassify Cottonwood Creek from 3B to 2C, resulting in a change in the addition of the non-game fishery use. The UAA completed by Goshen County Conservation District includes habitat sampling and limited data (due to lack of flow) for two sites, one was sampled in August 2006 and the other in July 2007. The habitat data are supplemented by historic aquatic life sampling efforts and a letter from WGFD supporting the reclassification. The proposed reclassification notice states that warmwater non-game fish were collected in 2006. We commend the State for upgrading the aquatic life use designation for Cottonwood Creek. The WQU supports reclassification of Cottonwood Creek from 3B to 2C.

Horse Creek

The State is proposing to add the "ww" notation to the current 2AB Classification for the segment of Horse Creek from its confluence with Stinking Water Creek downstream to the Nebraska border. Section 4(b)(i) states that all Class 2AB waters are designated coldwater unless identified as a warmwater game fishery by a "ww" notation in the Wyoming Surface Water Classification List.

The UAA completed by the Goshen County Conservation District is based on a Section 33(b)(v) demonstration that the limited habitat is a result of natural conditions. The UAA includes stream habitat data for seven sites during two days in August 2005. The habitat data are supplemented by historic data indicating that Horse Creek transitions from coldwater to warmwater fish assemblages due to increased temperatures resulting from lower elevation, changes in stream substrate to silt/sand, and a natural loss of fish cover. The WGFD submitted a letter supporting the reclassification. There are no WGFD records of coldwater fish in this

segment, whereas several entities have collected warmwater fish species. The WQU's preliminary position is that UAA supports the designated use change from 2AB to 2ABww.

**Fish Consumption**

The State is proposing to reclassify Cottonwood Creek from 3B to 2C, resulting in addition of the fish consumption designated use. As discussed above, CWA Section 101(a)(2) establishes as a national goal "water quality [that] provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water," wherever attainable. These goals are commonly referred to as the "fishable/swimmable" goals of the CWA. EPA interprets these goals as providing for the protection of aquatic communities and human health related to the consumption of fish and shellfish. In other words, EPA views "fishable" to mean that fish and shellfish can thrive in a waterbody and, when caught, can also be safely eaten by humans. This interpretation also satisfies the CWA Section 303(c)(2)(A) requirement that water quality standards protect public health.[3] A UAA is not required when adding a designated use, however the WQU supports reclassification of Cottonwood Creek from 3B to 2C.

**Drinking Water**

The State is proposing to reclassify Dater Creek, Deer Creek, and Cherry Creek from Class 2AB to 2C, resulting in removal of the drinking water use. As a result, the human health criteria applied to these waterbodies would change from the Appendix B Fish & Drinking Water criteria to the Fish Only criteria (Section 18). The radioactive material standard would also change (Section 22).

As stated above, EPA's position is that although the UAA requirement at 40 CFR § 131.10(j) does not address non-101(a)(2) uses such as drinking water, 40 CFR § 131.10(g) allows removal of a designated use "which is *not* an existing use" only if the State can "demonstrate" that the use is not attainable under the six criteria outlined in that section. Supporting information must be made available to the public for review and submitted to EPA. In general, the demonstration should address whether drinking water is an existing or attainable use.

Wyoming's WQS require a UAA to add or remove a designated use (Section 33). Section V of Wyoming's UAA Policy describes the information that must be included in the UAA and states "each UAA must contain information and or data that is specific to the petition being made and to the associated Section 33(b) factor where relevant." Furthermore, Section V of the Policy states that for (b)(ii), "In relation to drinking water, the UAA needs to demonstrate that water availability is not sufficient to support community or non-community drinking water supplies as defined under the federal Safe Drinking Water Act."

[3] See Section 3.2.3.2. of EPA's "Guidance for Implementing the January 2001 Methylmercury Water Quality Criterion" available at: http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/aqlife/pollutants/methylmercury/upload/mercury2010.pdf

The UAAs for Dater Creek, Deer Creek, and Cherry Creek do not address drinking water. The only rationale provided appears in the State's proposed reclassification (a separate document):

> The drinking water use designation is a presumptive use that is only assigned by default to waters known to support game fish, but is not presumed to be an attainable use on waters not known to support game fish. Because the use attainability analysis described in this document shows that the stream currently only supports non-game species, it is not logical to continue to designate a drinking water use.

Regardless of how a state groups their designated uses, EPA evaluates each use change independently. Whether or not the waterbody supports non-game fish is irrelevant to the evaluation of whether the drinking water use may be removed. To meet the requirements of 40 CFR § 131.10(g) and (h)(1) that prohibit the removal of a designated use that is an existing use, the State must demonstrate that drinking water is not an existing use. This could be done in several ways, such as contacting the local drinking water authority to confirm there are no drinking water intakes or future intakes planned in the waterbody, and the WQU can provide examples of how other states have demonstrated drinking water is not an existing use. In addition, the proposed use removal does not appear consistent with State law requirements contained in Section 33 or the UAA Policy. The WQU's preliminary position is that due to the lack of a demonstration that drinking water is not an existing use the proposed removal of the drinking water use is not supported.

**General Comments**

It is important for stakeholders to understand that because of the way Wyoming's WQS group (or bundle) designated uses in different Classifications, that although a stakeholder may only be interested in reclassifying a waterbody to change the designated aquatic life use, for example from 2AB to 2C, this reclassification would also result in removal of the drinking water use. Therefore, either stakeholders need to address the drinking water use in the design of the UAA, or they need to work with the State to have the State complete a separate justification for the removal of the drinking water use. In other words, when a reclassification results in changes to multiple designated uses, the rationale provided to the public for comment and submitted to EPA must address <u>all</u> of those changes to designated uses.

The WQU recommends that in the future, either the public notice for proposed designated use changes or the UAAs clearly explain the practical effect of the proposed use changes (i.e., the changes in criteria applied to the waterbodies) to enable the public to make informed comments. For purposes of the administrative record, it would also be helpful if the date of publication was included in the public notice so it is clear the State has complied with public notice requirements (currently it only indicates when the comment period closes).

**Conclusion**

Pending review of the public comments, the WQU's preliminary position is that the UAAs for Cottonwood Creek (3B to 2C), and Horse Creek (2AB to 2ABww) support the proposed fisheries and fish consumption use changes. The WQU would also recommend approval of the 2AB to 2C reclassifications for Dater Creek, Deer Creek, and Cherry Creek once the State provides documentation that drinking water is not an existing use. For the recreation use changes, we recommend deferring action because the State is working on a state-wide recreation UAA that will contain additional documentation relevant to the evaluation of the potential for these waters to support primary contact recreation. We also have specific questions and concerns regarding the recreation UAAs in support of the current proposals.

Please note that these comments are preliminary in nature and should not be interpreted as final EPA decisions under CWA § 303(c). If you have any questions, please call Tonya Fish on my staff at (303) 312-6832.

Sincerely,

Lareina Guenzel (acting for Karen Hamilton)

Karen Hamilton, Chief
Water Quality Unit